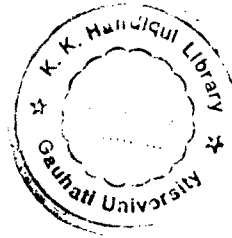


8/11/07

**A STUDY OF TEC VARIATIONS OVER INDIAN SUB-CONTINENT
AND DEVELOPMENT OF DUAL SHELL MODEL
FOR GAGAN**



**A THESIS SUBMITTED
FOR THE AWARD OF THE DEGREE OF
DOCTOR OF PHILOSOPHY**

BY

MADASWAMY IRULAPPAN

**GUIDED BY
PROF. P.H. TALUKDAR
DEPARTMENT OF INSTRUMENTATION AND USIC
GAUHATI UNIVERSITY**

2007